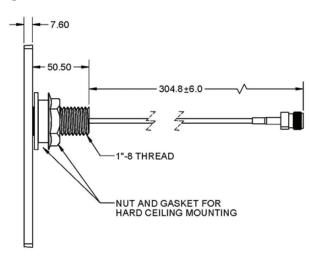


Smart Technology. Delivered.

SPECIFICATIONS	
MODEL	CFS60383P
Frequency	600-960MHz 1350-1550MHz 1690-2700MHz 3300-3800MHz
Peak Gain (Average/Max) (dBi)	2.9/3.5 @600-698MHz 3.3/3.6 @698-806MHz 3.5/3.6 @824-894MHz 4.6/5.4 @880-960MHz 4.1/5.2 @1350-1550MHz 3.9/4.4 @1690-1880MHz 3.8/4.1 @1850-1990MHz 4.6/5.3 @1910-2180MHz 5.8/6.3 @2300-2500MHz 6.8/7.1 @2500-2700MHz 4.1/4.4 @3300-3800MHz
Nominal Impedance	50Ω
Polarization	Horizontal
VSWR (Typical/Max :1)	<1.8/<1.8 @600-698MHz <1.5/<1.8 @698-806MHz <1.6/<1.8 @824-894MHz <1.6/<1.8 @880-960MHz <1.7/<1.8 @1350-1550MHz <1.8/<1.8 @1690-1880MHz <1.4/<1.8 @1690-1880MHz <1.4/<1.8 @1910-2180MHz <1.4/<1.8 @2300-2500MHz <1.4/<1.8 @2300-2700MHz <1.4/<1.8 @2300-2700MHz <1.7/<2.0 @3300-3800MHz
PIM (3rd Order, 2x20W), Typ/Max	<-156dBc/<-150dBc 600-960 MHz <-157dBc/<-150dBc 1690-2180 MHz
Azimuth Beam Width	360°, Omnidirectional
Max Power (Ambient 25°C/77°F)	50W
Dimensions (W x L x H)	117.2 x 180.3 x 7.6 mm (4.6" x 7.1" x 0.3")
Weight (without mounting kit)	197g (0.435lbs)
Radome	PC, UL94-V0
Color	White
Operating Temperature	-30° C to +70° C
Radome	-40° C to +85° C
RoHS Compliance	Yes

Figure 1:



# CFS60383P

## 600-3800 MHz LOW PIM CEILING MOUNT ANTENNA ASSEMBLY AND INSTALLATION INSTRUCTIONS



PATENT PENDING

Please read all instructions carefully before attempting to install this product.

#### **SAFETY**

The CFS60383P and all associated equipment should be installed in accordance with all applicable local and national electrical code guidelines to ensure safe operation.

#### **APPLICATION**

The Multi-Band Antenna is designed to provide simultaneous omnidirectional coverage in 600-3800MHz bands for indoor applications. All bands may be transmitted or received without interference from the other but requiring only one connection.

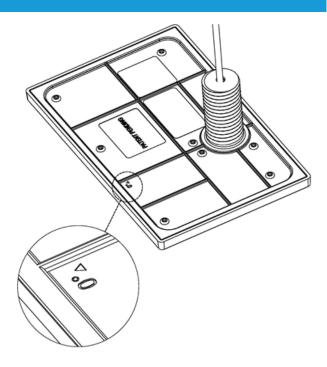
#### **LOCATION**

For best results, mount the antenna above exterior obstructions in a location near the center of the coverage area. A line-of-sight path between the antenna and active locations generally works best. Although frequency signals penetrate cubical dividers, partitions, and interior walls with little attenuation, reinforced block walls, metal surfaces, and steel shelving may attenuate signals or cause multipath, a condition where reflected signals interfere with the primary signal path. Avoid mounting next to a column or vertical support that could create a "shadow zone" of reduced coverage to one portion of the room.

## **SAFETY**

A thread post on the back of the antenna and a supplied mounting nut are the mounting method when access is available to both sides of the mounting surface, such as suspended ceiling tile. Mark the desired mounting location on the tile and cut a  $\emptyset$ 30mm (1.18") hole for threaded post. Feed the cables through the hole and secure the antenna with the mounting nut and gasket if necessary (see Figure 1).

### **ANGLE MARKING**



 $0^{\circ}$   $\Delta$  marking below the antenna base plate indicates 0 degree angle of azimuth plane radiation pattern.

### **PRECAUTION**

To avoid damage of the connector joint, use the correct size of wrench to hold the connector body shell properly during tightening. Use 14mm wrench for the N connector or 18mm wrench for the 4.3-10 connector.

#### For best PIM results:

1. Make sure the connectors are clean and free from any metal flakes/dirt & tighten the connector using torque wrench follow the torque specify below:

4.3-10 Type	N-Type
44.3 lbs in (5Nm)	25 lbs in (2.82Nm)

- 2. Avoid extreme bending to the cable.
- 3. Do not remove dust cap from connector when not in use.

#### Warranty and Liability

Laird warrants to the original purchaser that antenna products will remain free from defects in materials and workmanship for a period of (5) years from the purchase date. If any such defect is discovered within the warranty period, Laird will at its sole option, repair or replace the Product free of charge upon its return to the factory. This warranty applies only if the Product is used in a normal fashion, and is void if the Product is abused, disassembled, tampered with, used unreasonably, or fails as a result of normal wear. Furthermore, this warranty applies only to defects, which occur where the proper Product is selected as recommended by Laird and is used in the fashion recommended by Laird for the defective Product. THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, AND IS LIMITED TO A PERIOD OF (5) YEARS FROM THE DATE OF ORIGINAL PURCHASE. LAIRD IS NOT LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES OF ANY KIND. ANY WARRANTY EXTENDED HEREIN SHALL BE LIMITED TO THE PRICE PAID TO LAIRD FOR THE DEFECTIVE PRODUCT. WHERE STATE OR LOCAL LAW GOVERNS THE PERIOD OF WARRANTY, SUCH PERIOD SHALL CONTROL.

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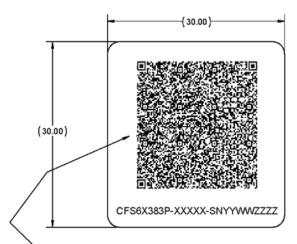
Asia:

IAS-AsiaSales@lairdtech.com

Middle East and Africa: +44.1628.858941 IAS-MEAUSales@lairdtech.com

### **QR CODES**

There is a unique QR Codes placed on the back of each antenna. System manager can simply scan the code with a smartphone and instantly see all of the needed performance data of the antenna. This solution provides fast, accurate data and allows customers to instantly track even more information than they could previously review.



TEST TO EMBEDDED IN QR CODE:
CFS6X383P-XXXXX-SNYYWWZZZZ VSWR: V@FREQUENCY BANDS
LOW PIM LOW BAND: -LdBc, HIGH BAND: -LdBc

V = VALUE OF VSWR @ FREQUENCY BANDS L = PIM VALUE AT LOW BAND & HIGH BAND